

**PATENT** 

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of

John M. Belcea

Group Art Unit: 2173

Serial No.: 10/799,398

Examiner: Not Assigned

Filed: March 12, 2004

FOR: SYSTEM AND METHOD FOR

ANALYZING THE PRECISION OF GEO-LOCATION SERVICES IN A WIRELESS

**NETWORK TERMINAL** 

## **INFORMATION DISCLOSURE STATEMENT**

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

In accordance with 37 C.F.R. §§ 1.56 and 1.97-1.98, the references listed on the enclosed Form PTO-1449 and/or Substitute Form PTO-1449 ("Form 1449") are submitted for consideration by the Examiner in the examination of the above-identified patent application.

Copies of U.S. patents and patent applications that are listed on the accompanying Form 1449 are not enclosed herewith in accordance with the U.S. Patent and Trademark Office's waiver of the requirement under 37 CFR 1.98 (see Official Gazette Notice of August 5, 2003). Copies of other references identified on the accompanying Form 1449 are enclosed herewith. All documents, with the exception of French Patent FR2683326, are in English and require no statement of relevance. Regarding French Patent FR2683326, an English abstract is provided as

Application No. 10/799,398

Information Disclosure Statement

a brief statement of relevance to the above identified Application as required under 37 C.F.R. §

1.98. Also, since the present Information Disclosure Statement is being filed prior to issuance of

a first Office Action on the merits, no certification under 37 C.F.R. § 1.97(e) or fee under 37

C.F.R. § 1.17(b) is required. Should any fees be required, the Director is hereby authorized to

charge the fee to Deposit Account No. 07-0181. (A duplicate copy of this communication is

enclosed for that purpose.)

The Examiner is requested to consider the attached documents in connection with the

above-identified application and to return a copy of Form PTO-1449 to the undersigned with the

Examiner's initials in the spaces provided.

Submission of this Information Disclosure Statement does not constitute an admission by

the Applicant as to the materiality of the attached documents to the application, nor does the

Applicant waive any right to challenge the validity of the documents as prior art should such

action be deemed appropriate.

spectfully submitted

Joseph J. Buezynski Attornex for Applicant

Reg. No. 35,084

Gardner Carton & Douglas LLP

1301 K Street, N.W.

Suite 900 East Tower

Washington, DC 20005

Dated: <u>Cugust 30</u> DC01/463674.1

2004

Approved for use through 10/31/99. OMB 0651-0031
Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

ostitute for form 1449A/PTO

AUG 3 0 2004

## **INFORMATION DISCLOSURE** STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet Of

Complete if Known						
Application Number	10/799,398					
Filing Date	03/12/2004					
First Named Inventor	John M. BELCEA					
Group Art Unit	2173					
Examiner Name	Not Assigned					
Attorney Docket Number	P2113US / 0016					

Examiner	Cite	U.S. Patent Docu		Name of Patentee or Applicant	Date of Publication of	Pages, Columns, Lines, Where Relevant
Initials *	No.1	Number	Kind Code <sup>2</sup> (if known)	of Cited Document	Cited Document MM-DD-YYYY	Passages or Relevant Figures Appear
		6,405,049		Herrod et al.	06/11/02	
		6,366,568		Bolgiano et al.	04/02/02	
		6,359,872		Mahany et al.	03/19/02	
		6,349,210		Li	02/19/02	
		6,349,091		Li	02/19/02	
		6,327,300		Souissi et al	12/04/01	
		6,304,556		Haas	10/16/01	
		6,285,892		Hulyalkar	09/04/01	
		6,275,707		Reed et al.	08/14/01	
		6,249,516		Brownrigg et al	06/19/01	
		6,246,875		Seaholtz et al.	06/12/01	
		6,240,294		Hamilton et al.	05/29/01	
-		6,223,240		Odenwald et al.	04/24/01	
		6,222,504		Oby	04/24/01	
		6,222,463		Rai	04/24/01	
		6,208,870		Lorello et al.	03/27/01	
		6,192,230		Van Bokhorst et al.	02/20/01	
		6,192,053		Angelico et al.	02/20/01	
		6,178,337		Spartz et al.	01/23/01	
		6,163,699		Naor et al.	12/19/00	
	1	6,147,975		Bowman-Amuah	11/14/00	
		6,132,306		Trompower	10/17/00	
		6,130,881		Stiller et al.	10/10/00	-
		6,122,690		Nannetti et al.	09/19/00	
		6,115,580		Chuprun et al.	09/05/00	
		6,108,738		Chambers et al.	08/22/00	
		6,104,712	1	Robert et al.	08/15/00	
		6,078,566		Kikinis	06/20/00	
		6,067,297		Beach	05/23/00	
		6,067,291		Kamerman et al	05/23/00	
		6,064,626		Stevens	05/16/00	
	1	6,052,752		Kwon	04/18/00	
		6,052,594		Chuang et al.	04/18/00	
		6,047,330		Stracke Jr.	04/04/00	
		6,044,062		Brownrigg et al.	03/28/00	
	1	6,034,542		Ridgeway	03/07/00	
· · · · · ·	1	6,029,217		Arimilli et al.	02/22/00	
	Ť .	6,028,853		Haartsen	02/22/00	
	1	5,991,279		Haugli et al.	12/23/99	
	1	5,987,033		Boer et al.	11/16/99	
		5,987,011		Toh	11/16/99	
	i -	5,943,322		Mayer et al.	08/24/99	<del>                                     </del>
		5,936,953		Simmons	08/10/99	
		5,909,651	+ +	Chander et al.	06/01/99	
		5,903,559		Acharya et al.	05/11/99	
		5,896,561	+ +	Schrader et al.	04/20/99	
	† –	5,886,992		Raatikainen et al.	03/23/99	

Attorney Docket No. P2113US/0016 Serial No. 10/799,398 Applicant: John M. BELCEA Filing Date: 03/12/2004 Group: 2173

_	•	_		-		
S	h	е	et	2	of	4

Eunminne	Cita	U.S. Patent Doo	cument	Name of Patentee or Applicant	Date of Publication of	Pages, Columns, Lines, Where Relevan
Examiner Initials *	Cite No. <sup>1</sup>	Number	Kind Code <sup>2</sup> (if known)	of Cited Document	Cited Document MM-DD-YYYY	Passages or Relevant Figures Appear
		5,881,372		Kruys	03/09/99	
		5,881,095		Cadd	03/09/99	
		5,877,724		Davis	03/03/99	
		5,870,350		Bertin et al.	02/09/99	
		5,857,084		Klein	01/05/99	
		5,845,097		Kang et al.	12/01/98	
		5,844,905		McKay et al.	12/01/98	
		5,822,309		Ayanoglu et al.	10/13/98	
		5,809,518		Lee	09/15/98	
		5,805,977		Hill et al.	09/08/98	
		5,805,842		Nagaraj et al.	09/08/98	
		5,805,593		Busche	09/08/98	
		5,796,741		Saito et al.	08/18/98	
		5,796,732		Mazzola et al	08/18/98	
		5,794,154		Bar-On et al.	08/11/98	
		5,787,080		Hulyalkar et al.	07/28/98	
	<u> </u>	5,781,540		Malcolm et al.	07/14/98	
		5,774,876		Wooley et al.	06/30/98	
		5,745,483		Nakagawa et al.	04/28/98	
		5,717,689		Ayanoglu	02/10/98	
		5,706,428		Boer at al.	01/06/98	
_		5,701,294		Ward et al.	12/23/97	
		5,696,903		Mahany	12/09./97	
		5,687,194		Paneth et al.	11/11/97	
		5,684,794		Lopez et al.	11/04/97	
		5,680,392		Semaan	10/21/97	
		5,652,751		Sharony	07/29/97	
		5,644,576		Bauchot et al.	07/01/97	
	_	5,631,897		Pacheco et al.	05/20/97	
		5,627,976		McFarland et al.	05/06/97	
		5,623,495		Eng et al.	04/22/97	
		5,621,732		Osawa	04/15/97	
		5,618,045		Kagan et al.	04/08/97	
•••		5,615,212		Ruszczyk et al.	03/25/97	
		5,572,528		Shuen	11/05/96	
		5,555,540		Radke	09/10/96	
		5,555,425		Zeller et al.	09/10/96	
		5,517,491		Nanni et al.	05/14/96	
		5,502,722		Fulghum	03/26/96	
	<b> </b>	5,424,747		Chazelas	06/13/95	
	<u> </u>	5,412,654		Perkins	05/02/95	
	ļ	5,392,450		Nossen	02/21/95	
		5,317,566		Joshi	05/31/94	
	<b></b>	5,241,542		Natarajan et al.	08/31/93	
		5,233,604		Ahmadi et al.	08/03/93	
	1	5,231,634		Giles et al.	07/27/93	
	<u> </u>	5,068,916		Harrison et al.	11/26/91	
	<b>_</b>	5,034,961		Adams	07/23/91	
	ļ	4,910,521		Mellon	03/20/90	
		4,747,130		Но	05/24/88	
		4,742,357		Rackley	05/03/88	
	ļ	4,736,371		Tejima et al.	04/05/88	
		4,617,656		Kobayashi et al.	10/14/86	

Attorney Docket No. P2113US/0016 Serial No. 10/799,398 Applicant: John M. BELCEA Filing Date: 03/12/2004 Group: 2173 Sheet 3 of 4

U.S. PATENT DOCUMENTS							
_		U.S. Patent Doc	cument	Name of Patentee or Applicant	Date of Publication of	Pages, Columns, Lines, Where Relevant	
Examiner Initials *	Cite No. <sup>1</sup>	Number	Kind Code <sup>2</sup> (if known)	of Cited Document	Cited Document MM-DD-YYYY	Passages or Relevant Figures Appear	
		4,494,192		Lew et al.	01/15/85		

PUBLISHED U.S. PATENT APPLICATIONS						
Examiner Initials* Cite No.1 Publication No. Name of Patentee or Applicant of Cited Document MM-DD- YYYY  Name of Patentee or Applicant of Cited Document MM-DD- YYYYY  Pages, Columns, Lines, Relevant Passages or Reference or Applicant of Cited Document MM-DD- YYYYY						
		2001/0053699	McCrady et al.	12/20/01		
		2002/0013856	Garcia-Luna-Aceves	01/31/02	, <u></u>	

			F	OREIG	N PATENT DOCU	MENTS		
Examin er Initials*	Cite No.1 Office <sup>3</sup> Number <sup>4</sup> Kind Co		or Applicant of		Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sub>6</sub>	
		EPO	EP 0513841	A2		11/19/92	<b>V</b>	Yes
		EPO	EP 0924890	A2		06/23/99		Yes
		EPO	EP 0627827	A2		12/07/94		Yes
		WIPO	WO 9912302			03/11/99		Yes
		WIPO	WO 9839936			09/11/98		Yes
		WIPO	WO 9724005			07/03/97		Yes
		WIPO	WO 9608884			03/21/96		Yes
		WIPO	WO 0235253			05/02/02		Yes
_		WIPO	WO 0137483			05/25/01		Yes
•		WIPO	WO 0137482			05/25/01		Yes
		WIPO	WO 0137481			05/25/01		Yes
		WIPO	WO 0135567			05/17/01		Yes
		WIPO	WO 0133770			05/10/01		Yes
		WIPO	WO 0110154			02/08/01		Yes
		WIPO	WO 0034932			06/15/00		Yes
		Canada	CA 2132180			03/16/96		Yes
		France	FR 2683326			07/05/93		No

	OTHER PRIOR ART NON PATENT LITERATURE DOCUMENTS							
Examiner Initials *	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.						
		WONG, et al., "Soft Handoffs in CDMA Mobile Systems," December 1997, IEEE Personal Communications						
		WONG et al., "A Pattern Recognition System for Handoff Algorithms," July 2000, IEEE Journal on Selected Areas in Communications, Vol. 18, No. 7						
		Andras G. VALKO, "Cellular IP: A New Approach to Internet Host Mobility," January 1999, ACM Computer Communication Review						
		Richard NORTH, Dale BRYAN and Dennis BAKER, "Wireless Networked Radios: Comparison of Military, Commercial and R&D Protocols," February 28-March 3, 1999, 2 <sup>nd</sup> Annual UCSD Conference on Wireless Communications, San Diego, CA						
		Benjamin B. PETERSON, Chris KMIECIK, Richard HARTNETT, Patrick M. THOMPSON, Jose MENDOZA and Hung NGUYEN, "Spread Spectrum Indoor Geolocation," August 1998, Navigation: Journal of the Institute of Navigation, Vol. 45, No. 2, Summer 1998						

Attorney Docket No. P2113US/0016

Serial No. 10/799,398 Applicant: John M. BELCEA Filing Date: 03/12/2004

Group: 2173 Sheet 4 of 4

		OTHER PRIOR ART NON PATENT LITERATURE DOCUMENTS	
Examiner Initials *	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	
		Josh BROCH, David A. MALTZ, David B. JOHNSON, Yih-Chun HU and Jorjeta JETCHEVA, "A Performance Comparison of Multi-Hop Wireless Ad Hoc Network Routing Protocols," October 25-30, 1998, Proceedings of the 4 <sup>th</sup> Annual ACM/IEEE International Conference on Mobile Computing and Networking	
		C. David YOUNG, "USAP: A Unifying Dynamic Distributed Multichannel TDMA Slot Assignment Protocol"	
		Chip ELLIOTT and Bob HEILE, "Self-Organizing, Self-Healing Wireless Networks," 2000 IEEE	
		J.J. GARCIA-LUNA-ACEVES and Asimakis TZAMALOUKAS, "Reversing the Collision-Avoidance Handshake in Wireless Networks"	
		J.J. GARCIA-LUNA-ACEVES and Marcelo SPOHN, "Transmission-Efficient Routing in Wireless Networks Using Link-State Information"	
		J.J. GARCIA-LUNA-ACEVES and Ewerton L. MADRUGA, "The Core-Assisted Mesh Protocol," August 1999, IEEE Journal on Selected Areas in Communications, Vol. 17, No. 8	
		Ad KAMERMAN and Guido ABEN, "Net Throughput with IEEE 802.11 Wireless LANs"	
		J. R. McCHESNEY and R.J. SAULITIS, "Optimization of an Adaptive Link Control Protocol for Multimedia Packet Radio Networks"	
		Ram RAMANATHAN and Regina ROSALES-HAIN, "Topology Control of Multihop Wireless Networks Using Transmit Power Adjustment"	
		Ram RAMANATHAN and Martha E. STEENSTRUP, "Hierarchically-Organized, Multihop Mobile Wireless Networks for Quality-of-Service Support"	
		Martha E. STEENSTRUP, "Dynamic Multipoint Virtual Circuits for Multimedia Traffic in Multihop Mobile Wireless Networks"	
		Zhenya TANG and J.J. GARCIA-LUNA-ACEVES, "Collision-Avoidance Transmission Scheduling for Ad-Hoc Networks"	
		George Vardakas and Wendell KISHABA, "QoS Networking With Adaptive Link Control and Tactical Multi-Channel Software Radios"	

Examiner	Date	
Signature	Considered	

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>&</sup>lt;sup>1</sup> Unique citation designation number. <sup>2</sup> See attached Kinds of U.S. Patent Documents. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.